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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

DEL SOLE, JOSEPH S

ART UNIT	PAPER NUMBER
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1722

DATE MAILED: 04/26/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/068,246

Applicant(s)

HORNA ET AL.

Examiner

Joseph S. Del Sole

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 17-33 is/are pending in the application.
- 4a) Of the above claim(s) 19,20,22 and 24-26 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 17 and 18 is/are rejected.
- 7) ☒ Claim(s) 21,23 and 27-33 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 2/5/02.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date: _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

1. Applicant's election without indication of traverse of claims 17-18, 21, 23 and 27-33 in the response of 3/19/04 is acknowledged.
2. Claims 19-20, 22 and 24-26 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to nonelected species, there being no allowable generic or linking claim. Election was made **without** traverse as noted above.

Specification

3. The abstract of the disclosure is objected to because **a)** the abstract should be one paragraph and therefore second paragraph: "Fig. 1" should be deleted. Correction is required. See MPEP § 608.01(b).
4. The following guidelines illustrate the preferred layout for the specification of a utility application. These guidelines are suggested for the applicant's use.

Arrangement of the Specification

As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in upper case, without underlining or bold type, as a section heading. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

- (a) TITLE OF THE INVENTION.
- (b) CROSS-REFERENCE TO RELATED APPLICATIONS.
- (c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT.
- (d) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISC (See 37 CFR 1.52(e)(5) and MPEP 608.05. Computer program listings (37 CFR 1.96(c)), "Sequence Listings" (37 CFR 1.821(c)), and tables having more than 50 pages of text are permitted to be submitted on compact discs.) or
REFERENCE TO A "MICROFICHE APPENDIX" (See MPEP § 608.05(a). "Microfiche Appendices" were accepted by the Office until March 1, 2001.)
- (e) BACKGROUND OF THE INVENTION.

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- (1) Field of the Invention.
- (2) Description of Related Art including information disclosed under 37 CFR 1.97 and 1.98.
- (f) BRIEF SUMMARY OF THE INVENTION.
- (g) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).
- (h) DETAILED DESCRIPTION OF THE INVENTION.
- (i) CLAIM OR CLAIMS (commencing on a separate sheet).
- (j) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).
- (k) SEQUENCE LISTING (See MPEP § 2424 and 37 CFR 1.821-1.825. A "Sequence Listing" is required on paper if the application discloses a nucleotide or amino acid sequence as defined in 37 CFR 1.821(a) and if the required "Sequence Listing" is not submitted as an electronic document on compact disc).

5. The disclosure is objected to because of the following informalities: **a)** the disclosure (i.e., pages 1, 4, 5) should not refer to specific claim numbers because claim content and numbering can change during prosecution thereof; **b)** the disclosure lacks the appropriate section headings as suggested above.

Appropriate correction is required.

Claim Objections

6. Claims 21 is objected to because of the following informalities: **a)** the last line of claim 21 refers to a Figure number, this reference should be deleted from the claim.

Appropriate correction is required.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

9. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

10. Claims 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Cockings et al (5,492,706) in view of Allen (1,759,928).

Cockings et al teach a nozzle arrangement (Figures 1 and 4) having two inner nozzles (Fig 4, #20) for extruding at least one inner substance and two outer nozzles (Fig 4, #21) for extruding at least one outer substance wherein the outer nozzles each surround an inner nozzle with clearance, and all of the nozzles are rotatable about a common axis of rotation (col 2, lines 4-25); the inner nozzles each have a mouth and the outer nozzles each have a mouth.

Cockings et al fail to teach that the mouths of the outer nozzles are disposed in flow direction downstream of the mouths of the inner nozzles.

Allen teaches the mouth of an outer nozzle (Fig 2, #24) disposed in the flow direction downstream of the mouth of an inner nozzle (Fig 2, #25) for the purpose of allowing the discharge from the outer nozzle to begin contact with the discharge from the inner nozzle before exiting the die (page 1, line 100 - page 2, line 7).

It would have been obvious to one having ordinary skill in the art at the time of the Applicant's invention to have modified the invention of Cockings et al with the mouths of the outer nozzles being disposed in flow direction downstream of the mouths of the inner nozzles as taught by Allen because it enables contact between two discharges under pressure before exit from the die thereby increasing adherence between the discharges.

11. Claims 17 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cockings et al (5,492,706) in view of Koppa (4,715,803) and Allen (1,759,928).

Cockings et al teach a nozzle arrangement (Figures 1 and 4) having two inner nozzles (Fig 4, #20) for extruding at least one inner substance and two outer nozzles (Fig 4, #21) for extruding at least one outer substance wherein the outer nozzles each surround an inner nozzle with clearance, and all of the nozzles are rotatable about a common axis of rotation (col 2, lines 4-25); the inner nozzles each have a mouth and the outer nozzles each have a mouth.

Cockings et al fail to teach that the mouths of the outer nozzles are disposed in flow direction downstream of the mouths of the inner nozzles and that the outer nozzles

at the level of the mouths of the inner nozzles are narrowed in the direction of flow of the substances.

Koppa and Allen teach the mouth of an outer nozzle (Koppa: Fig 2, #19; Allen: Fig 2, #24) disposed in the flow direction downstream of the mouth of an inner nozzle (Koppa: Fig 2, #17; Allen: Fig 2, #25) for the purpose of allowing the discharge from the outer nozzle to begin contact with the discharge from the inner nozzle before exiting the die (Allen, page 1, line 100 - page 2, line 7) and teach the outer nozzle at the level of the mouth of the inner nozzle being narrowed in the direction of flow of the substances (Koppa: Fig 2; Allen: Fig 2) for the purpose of permitting a relatively uniform flow of the material therethrough (Koppa: col 6, lines 2-5).

It would have been obvious to one having ordinary skill in the art at the time of the Applicant's invention to have modified the invention of Cockings et al with the mouths of the outer nozzles being disposed in flow direction downstream of the mouths of the inner nozzles as taught by Allen because it enables contact between two discharges under pressure before exit from the die thereby increasing adherence between the discharges and to have the outer nozzle at the level of the mouth of the inner nozzle being narrowed in the direction of flow of the substances as taught by Koppa because it permits a relatively uniform flow of the material therethrough.

Allowable Subject Matter

12. Claims 21, 23 and 27-33 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Claims 27-23 are allowable

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due to their partial dependence on claims 21 and 23. Should non-elected claims 19-20, 22 and 24-26 be cancelled then claims 27-30 must be amended to be dependent only on non-cancelled claims. Also, the additional objection to claim 21, noted at paragraph six of this Office action, must also be corrected.


13. The following is a statement of reasons for the indication of allowable subject matter: the prior art of record fails to teach the nozzle arrangement of claim 17 within a nozzle carrier further having a stator in which first, second and third feed channels are formed as well as a rotor which carries the nozzles and is rotatably supported in the stator wherein between the stator and the rotor a first annular space is formed, which connects the second feed channel to a first outer nozzle, and a second annular space is formed which connects the third feed channel to the second outer nozzle.

Correspondence

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Joseph S. Del Sole whose telephone number is (571) 272-1130. The examiner can normally be reached on Monday through Friday from 8:30 A.M. to 5:00 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ms. Wanda Walker, can be reached at (571) 272-1151. The official fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306 for both non-after finals and for after finals.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from the either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on the access to the Private PAIR system, contact the Electronic Business Center (EBC) at 886-217-9197 (toll-free).


J.S.D.
April 20, 2004